WBS No: 1FCF01 1FCFPLN030 Activity ID:

# **Rocky Flats Closure Project Baseline Cost and Basis of Estimate**

Project WBS Filter Activity Filter

Baseline Devl 1FCF

Starts In FY

WBS No: 1FCF0	O1 Title:	PA/LA Closure Project Mgmt and Int	egra.									
Activity ID: 1FC	FPLN030 Description:	PA Reduction Project Mgt & Integration	1					Cost Risk	2 Schedule R	Pisk 2		
Line Item	Descript	otion Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Reduced PA P&I		lot	EE	3,494	3,494	132,401	58,668	0	191,070	64,560	255,630
SYS	Contingency And Escalation	1.00	) ea	EE	0	0	0	0	452	452	0	452
	Tot			030:		3,494	132,401	58,668	452	191,522	64,560	256,082

## Line Item 1 - Reduced PA P&I

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

Experience Item Desc - 7 Staff members with expertise in Security, Bldg. Ops, NMC, Classification, Management, Project Management, and Holdup

Measurements/Removal.

Breakdown of Cost Data:

Item - Staff level determined by management as necessary to facilitate aggressive acceleration of PA Reduction schedule.

Units - 7.7 FTE (greater than 1 year activity)

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

#### Resources

es		C	ost Element			Skill			Department	Curve	Quantity	Units
7	'50	STRAIGHT	TIME BASE	M020	MANAGE	RS (GRADE 69 - 72)	K289S	PA Clos	sure	Linear	582.27	Hours
Fac	ctors	1	FTE (PA)		1810	HOURS/FTE/YR		0.41	YR			
										0.78462 [SYS 06030	0] Target Adj FY	01-05
7	'50	STRAIGHT	TIME BASE	M030	MANAGE	MENT INTEGRATORS (GR	K289S	PA Clos	sure	Linear	582.27	Hours
Fac	ctors	1	FTE (FR)		1810	HOURS/FTE/YR		0.41	YR			
										0.78462 [SYS 06030	0] Target Adj FY	01-05
7	'50	STRAIGHT	TIME BASE	M030	MANAGE	MENT INTEGRATORS (GR	R100S	RMRS:	Salaried	Linear	582.27	Hours
Fac	ctors	1	FTE (JP)		1810	HOURS/FTE/YR		0.41	YR			
				_						0.78462 [SYS 06030	0] Target Adj FY	01-05
7	'50	STRAIGHT	TIME BASE	M040	MANAGE	RS (GRADE 64 - 68)	W201S	Integrat	ed Planning	Linear	582.27	Hours
Fac	ctors	1	FTE (MT)		1810	HOURS/FTE/YR		0.41	YR			
_				_						0.78462 [SYS 06030		
7	'50	STRAIGHT	TIME BASE	P140	SAFEGU	ARDS AND OTHER SECURI	S100S	SSOC S	Salaried	Linear	582.27	Hours
Fac	ctors	1	FTE (GW)		1810	HOURS/FTE/YR		0.41	YR			
										0.78462 [SYS 06030	0] Target Adj FY	01-05
7	'50	STRAIGHT	TIME BASE	P170	OTHER A	ADMINISTRATIVE & PROFES	R100S	RMRS:	Salaried	Linear	582.27	Hours
Fac	ctors	1	FTE (KJ)		1810	HOURS/FTE/YR		0.41	YR			
					,					0.78462 [SYS 06030	0] Target Adj FY	01-05
Α	52	TENERA		M030	MANAGE	MENT INTEGRATORS (GR	K289S	PA Clos		Linear	53,568.41	Dollars
Fac	ctors	1	FTE Level 9 (MB)		1810	HOURS/FTE/YR		0.41	YR	92 DOLLARS/H	<del>I</del> R	
_				_						0.78462 [SYS 06030		
Α	5C	SUPPLIES		0000	NONE		K289S	PA Clos	sure	Linear	3,923.09	Dollars
Fac	ctors	5000	Dollars									
								,		0.78462 [SYS 06030		
Α	5M	TRAVEL/T	RAIN/RELOCAT	0000	NONE		K289S	PA Clos	sure	Linear	1,176.93	Dollars
Fac	ctors	1500	Dollars									

## Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	263.50	Dollars
	Factors 263 501 Dollars					

0.78462 [SYS 060300] Target Adj FY01-05

 WBS No:
 1FCF01
 Rocky Flats Closure Project
 Project
 Baseline\_Devl

 Activity ID:
 1FCFPLN030
 Baseline Cost and Basis of Estimate
 WBS Filter Activity Filter
 1FCF

ESC ESCALATION 0000 NONE ZDEPT No Department Linear 188.67 Dollars

Factors 188.675 Dollars

Activity ID: 1FCFPLN040 Description: PA Reduction Project Mgt & Integration Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Reduced PA P&I	1.00	lot	EE	7,757	7,757	293,962	124,396	0	418,359	140,220	558,579
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	29,613	29,613	0	29,613
·	Total for Activity 1FCFPLN040:							124.396	29,613	447.972	140.220	588,192

#### Line Item 1 - Reduced PA P&I

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

Experience Item Desc - 7 Staff members with expertise in Security, Bldg. Ops, NMC, Classification, Management, Project Management, and Holdup

Measurements/Removal.

Breakdown of Cost Data:

Item - Staff level determined by management as necessary to facilitate aggressive acceleration of PA Reduction schedule.

Units - 7.7 FTE (greater than 1 year activity)

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

#### Resources

s _		Co	st Element			Skill			Department	Curve	Quantity Units
	750	STRAIGHT	TIME BASE	M020	MANAGE	RS (GRADE 69 - 72)	K289S	PA Clos	sure	Linear	1,292.77 Hours
Fe	actors	1	FTE (PA)		1810	HOURS/FTE/YR		0.85	YR		
										0.84028 [SYS 0603	00] Target Adj FY01-05
	750	STRAIGHT	TIME BASE	M030	MANAGE	MENT INTEGRATORS (GR	K289S	PA Clos	sure	Linear	1,292.77 Hours
F	actors	1	FTE (FR)		1810	HOURS/FTE/YR		0.85	YR		
_		•								0.84028 [SYS 0603	00] Target Adj FY01-05
	750	STRAIGHT	TIME BASE	M030	MANAGE	MENT INTEGRATORS (GR	R100S	RMRS	Salaried	Linear	1,292.77 Hours
Fe	actors	1	FTE (JP)		1810	HOURS/FTE/YR		0.85	YR		
_		•								0.84028 [SYS 0603	00] Target Adj FY01-05
	750	STRAIGHT	TIME BASE	M040	MANAGE	RS (GRADE 64 - 68)	W201S	Integrat	ed Planning	Linear	1,292.77 Hours
Fe	actors	1	FTE (MT)		1810	HOURS/FTE/YR		0.85	YR		
_		•								0.84028 [SYS 0603	00] Target Adj FY01-05
	750	STRAIGHT	TIME BASE	P140	SAFEGU	ARDS AND OTHER SECURI	S100S	SSOC	Salaried	Linear	1,292.77 Hours
Fe	actors	1	FTE (GW)		1810	HOURS/FTE/YR		0.85	YR		
_								,		0.84028 [SYS 0603	00] Target Adj FY01-05
	750	STRAIGHT	TIME BASE	P170	OTHER A	ADMINISTRATIVE & PROFES	R100S			Linear	1,292.77 Hours
$F_{\ell}$	actors	1	FTE (KJ)		1810	HOURS/FTE/YR		0.85	YR		
_				,				,		0.84028 [SYS 0603	00] Target Adj FY01-05
	A52	TENERA		M030	MANAGE	MENT INTEGRATORS (GR	K289S	PA Clos	sure	Linear	118,934.60 Dollars
$F_{\ell}$	actors	1	FTE Level 9 (MB)		1810	HOURS/FTE/YR		0.85	YR	92 DOLLARS/	
_		1		ı				T		0.84028 [SYS 0603	00] Target Adj FY01-05
	A5C	SUPPLIES		0000	NONE		K289S	PA Clos	sure	Linear	4,201.39 Dollars
F	actors	5000	Dollars								
								,		0.84028 [SYS 0603	00] Target Adj FY01-05
	A5M	TRAVEL/TR	RAIN/RELOCAT	0000	NONE		K289S	PA Clos	sure	Linear	1,260.42 Dollars
Fe	actors	1500	Dollars								

# Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units

0.84028 [SYS 060300] Target Adj FY01-05

Starts In FY

WBS No: 1FCF01 Rocky Flats Closure Project Project Baseline Cost and Basis of Estimate Project Activity Filter

CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	17,867.78 Dollars
Factors	17867.8 Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	11,745.66 Dollars

Factors 11745.7 Dollars

Activity ID: 1FCFPLN050 Description: Reduced PA Closure Project Mgt/Integr Cost Risk 2 Schedule Risk 2

	·											
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Reduced PA P&I	1.00	lot	EE	11,834	11,834	469,074	277,905	0	746,979	170,622	917,600
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	159,414	159,414	0	159,414
	Total for Activity 1FCFPLN050:					11,834	469,074	277,905	159,414	906,393	170,622	1,077,015

## Line Item 1 - Reduced PA P&I

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safequards, Quality and Operations.

Experience Item Desc - 5 Staff members with expertise in Security, Bldg. Ops, NMC, Classification, Management, Project Management, and Holdup Measurements/Removal.

Breakdown of Cost Data:

Item - Staff level determined by management as necessary to facilitate aggressive acceleration of Reduced PA Closure schedule, and a corollary decrease in Security to a contingency level force and its related Site infrastructure.

Units - 5 FTE for a two year period

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

#### Resources

es	Cost Element			Skill			Department	C	urve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGE	ERS (GRADE 69 - 72)	K289S	PA (	Closure	Li	near	2,958.52	Hours
Factors	1 FTE		1810	HOURS/FTE/YR		2	YR				
								0.81727	[SYS 06010	0] .9285 - Targe	et Adj
750	STRAIGHT TIME BASE	M030	MANAGE	MENT INTEGRATORS (GR	K289S	PA (	Closure	Li	near	2,958.52	Hours
Factors	1 FTE		1810	HOURS/FTE/YR		2	YR				
								0.81727	[SYS 06010	0] .9285 - Targe	et Adj
750	STRAIGHT TIME BASE	M040	MANAGE	ERS (GRADE 64 - 68)	W201S	Inte	grated Planning	Li	near	2,958.52	Hours
Factors	1 FTE		1810	HOURS/FTE/YR		2	YR				
								0.81727	[SYS 06010	0] .9285 - Targe	et Adj
750	STRAIGHT TIME BASE	P140	SAFEGU	ARDS AND OTHER SECURI	S100S	SSC	OC Salaried	Li	near	2,958.52	Hours
Factors	1 FTE		1810	HOURS/FTE/YR		2	YR				
								0.81727	[SYS 06010	0] .9285 - Targe	et Adj
A52	TENERA	M030	MANAGE	MENT INTEGRATORS (GR	K289S	PA (	Closure	Li	near	272,184.10	Dollars
Factors	1 FTE Level 9		1810	HOURS/FTE/YR		2	YR	92	DOLLARS/H	R	
								0.81727	[SYS 06010	0] .9285 - Targe	et Adj
A5C	SUPPLIES	0000	NONE		K289S	PA (	Closure	Li	near	4,086.36	Dollars
Factors	5000 Dollars										
								0.81727	[SYS 06010	0] .9285 - Targe	et Adj
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE		K289S	PA (	Closure	Li	near	1,634.54	Dollars
Factors	2000 Dollars										

# Line Item SYS - Contingency And Escalation

BOE

## Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	109,120.40	Dollars
1	Factors	109120 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	50,294.02	Dollars
7	Factors	50294.0 Dollars							

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0.81727 [SYS 060100] .9285 - Target Adj

Starts In FY

Rocky Flats Closure Project
Baseline Cost and Basis of Estimate

Description: Limited Area Closure Project Mat/Integr

Project Baseline\_Devl WBS Filter 1FCF

Activity Filter \*

Cost Risk 2 Schedule Risk 2

			1=							_		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Reduced PA P&I	1.00	lot	EE	621	621	33,208	57,567	0	90,775	11,235	102,010
SYS	Contingency And Escalation	1.00	ea ea	EE	0	0	0	0	24,762	24,762	0	24,762
	Total for Activity 1FCFPLN0					621	33.208	57.567	24.762	115.537	11.235	126,772

#### Line Item 1 - Reduced PA P&I

Activity ID: 1FCFPLN070

1FCF01

1FCFPLN070

BOE

WBS No:

Activity ID:

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

Experience Item Desc - 3 Staff members with expertise in Security, Bldg. Ops, NMC, Classification, Management, Project Management, and Holdup

Measurements/Removal.

Breakdown of Cost Data:

Item - Staff level determined by management as necessary to facilitate acceleration of schedule for Limited Area Elimination and a corollary decrease in Security from a contingency level to an industrial level force, and its related Site infrastructure.

Units - 3 FTE for 1/2 year duration activity

Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

#### Resources

es		Cost Element	Skill	Department	Curve	Quantity U	Units
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	K289S PA Closure	Linear	621.29 Hou	ours
	Factors	1 FTF	1810 HOURS/FTF/YR	0.42 YR			

								0.81727	[515 06010	Jj .9285 - Target Adj
A52	TENERA		M030	MANAGE	MENT INTEGRATORS (GR	K289S	PA Closure	Line	ar	57,158.67 Dollars
Factors	1	FTE Level 9		1810	HOURS/FTE/YR		0.42 YR	92 [	OOLLARS/H	R
								0.81727	[SYS 06010	0] .9285 - Target Adj
A5C	SUPPLIES		0000	NONE		K289S	PA Closure	Line	ar	408.64 Dollars

Factors 500 DOLLARS

Line Item SYS - Contingency And Escalation

0.81727 [SYS 060100] .9285 - Target Adj

0.04707 [CVC.000400] 000F T----+ A-II

Starts In FY

# BOE

Resources	
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es		Cost Element	Skill			Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	16,707.09	Dollars
	Factors	16707.1 Dollars					·	•	·
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	8,054.97	Dollars
	Factors	8054.97 Dollars				· ————————————————————————————————————			,

V	WBS No: 1FCF0	<u>2</u> Title: Reduce PA to B371 and Es	st. Limited	Areas									
A	Activity ID: 1FCI	FENG100 Description: Prepare Environmental Asset	mental Assessment For RPA					Cost Risk 3 Schedule Risk 3					
	Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
					Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
	1	Engineering Design	1.00	lot	EE	93	93	2,760	4,669	0	7,429	1,347	8,776
		To	al for Activity 1FCFENG100: 93 2,760					4,669	0	7,429	1,347	8,776	

#### Line Item 1 - Engineering Design

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

Experience Item Desc -

Breakdown of Cost Data:

Item - Engineering Assessment

Units - 150 hours (onsite Engineer) and 50 hours of Subcontracted support

Unit Cost - Subcontract \$100/hour

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

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WBS No: 1FCF02 Activity ID: 1FCFENG100

# Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Project WBS Filter Baseline\_Devl

WBS Filter 1FCF
Activity Filter \*

Starts In FY

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

#### Resources

s		Cost Element Skill				Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	SHT TIME BASE E050 ENVIRONMENTAL ENGINEERS K		K109S	Env Sys, Stewardship & Compliance	Linear	93.38	Hours

Factors 100 Hours

SUBCONTRACTED SRVS

0.93376 [SYS 062100] 0.933760889 - Final

K289S PA Closure Linear 4.668.80 Dollars

Factors 100 Dollars/hour 50 Hours

0.93376 [SYS 062100] 0.933760889 - Final

Activity ID: 1FCFENG200

A5H

Description: Prelim Engineering Design for Reduced PA

0000 NONE

Cost Risk 4 Schedule Risk

4

	3 1 3 1 3											
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Engineering Design for Reduced PA	1.00 each EE		0	0	0	27,453	0	27,453	0	27,453	
	Tot	0	0	27.453	0	27.453	0	27.453				

## Line Item 1 - Engineering Design for Reduced PA

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

Experience Item Desc - Engineering Design package generated by subcontractor personnel.

Breakdown of Cost Data:

Item - Engineering Design estimated to require 200 hours by J. McClure.

Units - 200 hours

Unit Cost - \$98.00/hour

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

## Resource

ces	Cost Element				Skill		Department	Curve	Quantity	Units
	A5H	SUBCONT	TRACTED SRVS	E130	OTHER ENGINEERS	K289S	PA Closure	Linear	27,452.57	Dollars
	Factors	300	Hours		98 Dollars/Hr					

Activity ID: 1FCFENG300 Description: Complete IWCP Development For Reduced P.

0.93376 [SYS 062100] 0.933760889 - Final

Description: Complete IWCP Development For Reduced PA

Cost Risk
2 Schedule Risk

Line Item	Description	Quantity	Units E	BOE	Labor	Labor Hours	Labor Cost	Materials/Sub	Contingency	Total Prime	Burden Cost	Total Cost
			7	Гуре	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	IWCP Development for Reduced PA	1.00 lo	ot	EE	0	0	0	8,964	0	8,964	0	8,964
Total for Activity 1FCFENG300:						0	0	8,964	0	8,964	0	8,964

## Line Item 1 - IWCP Development for Reduced PA

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

Experience Item Desc - IWCP Package Development

Breakdown of Cost Data:

Item - Engineering Support

Units - 400 hours

Unit Cost - \$50/hour

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

#### Resources

rces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	K289S	PA Closure	Linear	8,964.10	Dollars

Factors 160 Hours 60 Dollars/hour

0.93376 [SYS 062100] 0.933760889 - Final

Activity ID: 1FCFENG400 Description: Final Design and Prep RFP For Reduced PA Cost Risk 2 Schedule Risk

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 WBS No:
 1FCF02
 Rocky

 Activity ID:
 1FCFENG400
 Baselin

Description

Prep/Issue RFP for Reduced PA Construction

Rocky Flats Closure Project
Baseline Cost and Basis of Estimate

Activity Filter Starts In FY BOE Labor Cost Materials/Sub Total Prime Burden Cost **Ouantity** Units Labor Labor Hours Contingency Total Cost TypeHours/Unit **Total Total** Cost & Escalation Cost 1.00 each EE 0 0 0 18,675 0 18,675 0 18,675

0

0

Project

WBS Filter

#### Line Item 1 - Prep/Issue RFP for Reduced PA Construction

## BOE

Line Item

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

Experience Item Desc -

Breakdown of Cost Data: Schedule item only. Cost contained in 1FCFPLN030 and Procurement.

Breakdown of Cost Da Ttem -

Units -Unit Cost -

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Total for Activity 1FCFENG400:

#### Resources

ces		Cost Element Skill		Department	Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000 NONE	K289S PA Closure	Linear	18,675.22	Dollars

Factors 200 Hours 100 Dollars/Hour

0.93376 [SYS 062100] 0.933760889 - Final

18,675

0

18,675

Activity ID: 1FCFNST200 Description: Install Reduced PA Fencing

Cost Risk 2 Schedule Risk 3

Baseline Devl

0

1FCF

18,675

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Reduced PA Fence	1.00 lot			0	0	0	328,636	0	328,636	0	328,636
SYS	'S Contingency And Escalation 1.00 ea				0	0	0	0	9,661	9,661	0	9,661
	Total for Activity 1FCFNS					0	0	328,636	9,661	338,297	0	338,297

### Line Item 1 - Reduced PA Fence

#### BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

Experience Item Desc - Construction of previous reconfiguration was estimated at \$10 Million. Best estimate pending engineering design and results of Vulnerability Assessment that is based upon a consensus of Security and PA Closure personnel with knowledge of proposed fence design.

Breakdown of Cost Data:

Item - Purchase of equipment and installation (within current Protected Area) of improved fence on the East side of B371 and interfaced with the current double fence on the North, South, and West sides. Fence construction will require approval of a DOE Waiver.

Units - 1 Security Fence

Unit Cost - \$1,000,000

Unit Cost Adjustment factor - None

Revised Unit Cost -

Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

# Resources

es		Cost Element Skill			Department	Curve	Quantity	Units	
	A5B	CONSTRUCTION	0000	NONE	K289S	PA Closure	Linear	328,636.00	Dollars
	-	100000 D II							

Factors 400000 Dollars

0.82159 [SYS 061500] .879872 - System

3

#### Line Item SYS - Contingency And Escalation

#### BOE

# Resources

es		Cost Element	Skill			Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	5,629.81	Dollars
	Factors	5629.81 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	4,031.11	Dollars

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Factors 4031.11 Dollars

Activity ID: 1FCFNST250 Description: Install Reduced PA Fencing - FY01

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2 Schedule Risk

Cost Risk

WBS No: 1FCF02 1FCFNST250 Activity ID:

# **Rocky Flats Closure Project Baseline Cost and Basis of Estimate**

Baseline Devl Project WBS Filter

1FCF

							Acti	vity Filter		Ste	arts In FY	
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Reduced PA Fence	1.00	lot	EE	0	0	0	585,731	0	585,731	0	585,731
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	31,053	31,053	0	31,053
	Total for Activity 1FCFNST250:					0	0	585,731	31,053	616,784	0	616,784

#### Line Item 1 - Reduced PA Fence

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safequards, Quality and Operations.

Experience Item Desc - Construction of previous reconfiguration was estimated at \$10 Million. Best estimate pending engineering design and results of Vulnerability Assessment that is based upon a consensus of Security and PA Closure personnel with knowledge of proposed fence design. Breakdown of Cost Data:

Item - Purchase of equipment and installation (within current Protected Area) of improved fence on the East side of B371 and interfaced with the current double fence on the North, South, and West sides. Fence construction will require approval of a DOE Waiver.

Units - 1 Security Fence

Unit Cost - \$1,000,000

Unit Cost Adjustment factor - None

Revised Unit Cost -Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

# Resource

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	0000	NONE K	(289S	PA Closure	Linear	585,730.80	Dollars

Factors 700000 Dollars

0.83676 [SYS 060300] Target Adj FY01-05

### Line Item SYS - Contingency And Escalation

BOE

#### Resources

es		Cost Element Skill			Department	Curve	Quantity	Units					
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	18,736.31	Dollars				
F	Factors 18736.3 Dollars												
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	12,316.61	Dollars				

12316 6 Dollars Factors

Activity ID:	1ECENIST200

#### Description: Install Reduced PA Alarm System

Cost Risk	2	Schedule Risk	3

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Install Reduced PA Alarm System	1.00	lot	EE	0	0	0	328,636	0	328,636	0	328,636
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	9,034	9,034	0	9,034
	Tot	0	0	328,636	9,034	337,670	0	337,670				

#### Line Item 1 - Install Reduced PA Alarm System

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safequards, Quality and Operations.

Experience Item Desc - New security system constructed at B371 to be used in combination with current PA alarm system. Best estimate preliminary engineering design and results of Vulnerability Assessment that is based upon a consensus of Security and PA Closure personnel with knowledge of proposed alarm system design.

Breakdown of Cost Data:

Item - Security Alarm System purchase, installation, and interfaces with existing/operating security system. Alarm system will require approval of a DOE Waiver. Units - PA Security Alarm System

Unit Cost - \$1,000,000

Unit Cost Adjustment factor - None

Revised Unit Cost -Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units	
·	•		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			

WBS No: 1FCF02 Activity ID: 1FCFNST300

# Rocky Flats Closure Project Baseline Cost and Basis of Estimate

K289S PA Closure

Project WBS Filter Baseline\_Devl 1FCF

 Activity Filter
 \*
 Starts In FY
 \*

 Linear
 328,636.00 Dollars

A5B CONSTRUCTION
Factors 400000 DOLLARS

0.82159 [SYS 061500] .879872 - System

# Line Item SYS - Contingency And Escalation

BOE

## Resources

es	Cost Element		Skill			Department	Curve	Quantity	Units
С	ON	CONTINGENCY 0000 NONE		ZDEPT	No Department	Linear	5,264.24	Dollars	
Fac	ctors	5264.24 Dollars							
E	SC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	3,769.35	Dollars

Factors 3769.35 Dollars

Activity ID: 1FCFNST350

Description: Install Reduced PA Alarm System

0000 NONE

Cost Risk 2 Schedule Risk

isk

3

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Install Reduced PA Alarm System	1.00	lot	EE	0	0	0	585,731	0	585,731	0	585,731
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	31,053	31,053	0	31,053
Total for Activity 1FCFNST350:							0	585,731	31,053	616,784	0	616,784

#### Line Item 1 - Install Reduced PA Alarm System

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

Experience Item Desc - New security system constructed at B371 to be used in combination with current PA alarm system. Best estimate preliminary engineering design and results of Vulnerability Assessment that is based upon a consensus of Security and PA Closure personnel with knowledge of proposed alarm system design.

Breakdown of Cost Data:

Item - Security Alarm System purchase, installation, and interfaces with existing/operating security system. Alarm system will require approval of a DOE Waiver. Units - PA Security Alarm System

Unit Cost - \$1,000,000

Unit Cost Adjustment factor - None

Revised Unit Cost -Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

## Resources

rces		Cost Element		Skill	Department	Curve	Quantity	Units
	A5B	CONSTRUCTION	0000	NONE	K289S PA Closure	Linear	585,730.80	Dollars

Factors 700000 DOLLARS

0.83676 [SYS 060300] Target Adj FY01-05

# Line Item SYS - Contingency And Escalation

BOE

# Resources

s		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	18,736.31	Dollars
	Factors	18736.3 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	12,316.61	Dollars

Factors 12316.6 Dollars

## Activity ID: 1FCFNST400 Description: Install Entry Control Shelters

	Bescription.							Cost Hist	= Schedille 1	_		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Install Entry Control Shelters	1.00	lot	EE	0	0	0	41,970	0	41,970	0	41,970
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	2,115	2,115	0	2,115
	To	0	0	41,970	2,115	44,085	0	44,085				

# Line Item 1 - Install Entry Control Shelters

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

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Cost Risk

2 Schedule Risk

WBS No: 1FCF02 1FCFNST400 Activity ID:

# **Rocky Flats Closure Project Baseline Cost and Basis of Estimate**

Project WBS Filter Activity Filter Baseline Devl 1FCF

Starts In FY

Experience Item Desc - Entry control shelters for Reduced PA

Breakdown of Cost Data:

Item - Purchase and Installation of Shelters

Units - 2 Shelters

Unit Cost - \$20,000/shelter

Unit Cost Adjustment factor - None

Revised Unit Cost -Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

## Resource

ces		Cost Element	İ	Skill		Department	Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	K289S	PA Closure	Max Backload	41,969.89	Dollars

Factors 50000 DOLLARS

0.8394 [SYS 060300] Target Adj FY01-05

# Line Item SYS - Contingency And Escalation

BOE

#### Resources

es		Cost Element		Skill		Department	Curve	Quantity	Units	
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	1,232.54	Dollars	
	Factors	1232.54 Dollars								
	FSC	ESCALATION	0000	NONE	7DFPT	No Department	Linear	882 53	Dollars	

Factors 882.533 Dollars

Activity ID: 1FCFNST500

Description: Upgrade CAS and B371 Annunciation Point

Cost Risk 2 Schedule Risk 2

Line Item	Description	Labor Hours	Labor Cost	Materials/Sub	Contingency	Total Prime	Burden Cost	Total Cost
		Total	Total	Cost	& Escalation	Cost		
1	Install CAS Annuciation Point in B371	0	0	96,227	0	96,227	0	96,227
SYS	Contingency And Escalation	0	0	0	4,284	4,284	0	4,284
	0	0	96,227	4,284	100,511	0	100,511	

#### Line Item 1 - Install CAS Annuciation Point in B371

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safequards, Quality and Operations.

Experience Item Desc - Purchase of equipment and installation of CAS Annuciation Point in B371

Breakdown of Cost Data:

Item - Installation/Implementation of Equipment

Units - 1 Annuciation Point and 500 feet of fencing (\$100/foot)

Unit Cost - \$110,000

Unit Cost Adjustment factor - None

Revised Unit Cost -

Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

## Resourc

rces	Cost Element		Skill		Department	Curve	Quantity	Units
	A5H SUBCONTRACTED S	RVS 0000	NONE	K289S	PA Closure	Back Loaded	96,227.20	Dollars

Factors 115000 Dollars

0.83676 [SYS 060300] Target Adj FY01-05

## Line Item SYS - Contingency And Escalation

BOE

#### Resource

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	2,496.23	Dollars
_	Factors	2496.23 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	1,787.37	Dollars
-									

1787.37 Dollars Factors

Activity ID:	1FCFNST600	Description:	ID/Design/Pred	LA	A Upgrades For PA Redu	ce
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Activity ID: 1FCF	**Description: ID/Design/Prep LA Upgrade	s For PA R	educe					Cost Risk	1 Schedule R	isk 3		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		

 WBS No:
 1FCF02
 Rocky Flats Closure Project
 Project
 Baseline\_Devl

 Activity ID:
 1FCFNST600
 Baseline Cost and Basis of Estimate
 1FCF
 1FCF

						Activi	iy r iiier		Starts	3 111 1 1	
1	Prep Limited Areas for PA Reduction	0	0	0	142,679	0	142,679	0	142,679		
			0	0	142,679	0	142,679	0	142,679		

## Line Item 1 - Prep Limited Areas for PA Reduction

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safequards, Quality and Operations.

Experience Item Desc - Breakdown of Cost Data:

Item - Preliminary Upgrades (FY00 funding constraint)

Units - 1 each

Unit Cost - \$40,000/electronic access system x 1 system

\$30,000/alarm system upgrade x 1 system \$100/foot of fence x 500 feet

\$82/hour for design x 400 hours

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

#### Resources

г									
es		Cost Element			Skill		Department	Curve	Quantity Units
	A5H	SUBCONTRACTED SRVS	0000	NONE		K289S	PA Closure	Linear	37,350.44 Dollars
	Factors	1 Prelim System		40000	Dollars/System				
								0.93376 [SYS 06210	0] 0.933760889 - Final
	A5H	SUBCONTRACTED SRVS	0000	NONE		K289S	PA Closure	Linear	46,688.04 Dollars
	Factors	500 Feet		100	Dollars/Foot				
								0.93376 [SYS 06210	0] 0.933760889 - Final
	A5H	SUBCONTRACTED SRVS	0000	NONE		K289S	PA Closure	Linear	28,012.83 Dollars
	Factors	1 Prelim Upgrade	-	30000	Dollars/Alarm System	·			•
		· -			-			0.93376 [SYS 06210	0] 0.933760889 - Final
ſ		CUID CONTRACTED CONC				1/0000	D 4 C 1		00 00T 00 D II

A5H SUBCONTRACTED SRVS 0000 NONE K289S PA Closure Max Frontload 30,627.36 Do							0.93370 [3	13 002 100] 0.93370	Uoog - Filial
	Λ.	L CLIDCONTDACTED CDVC	0000	NONE	K289S	PA Closure	Max Frontle		7.36 Dollars

Factors 400 Hours 82 Dollars/Hour (Sys Spec/Prelim

0.93376 [SYS 062100] 0.933760889 - Final

1 Schedule Risk

Starte In FV

## Activity ID: 1FCFNST650 Description: Procure/Install Limited Area Improvemnts

Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
1	Install Limited Area Fencing	1.00	lot	EE	0	0	0	356,348	0	356,348	0	356,348
2	Install Limited Area Access Systems	1.00	lot	EE	0	0	0	985,105	0	985,105	0	985,105
3	Upgrade LA Building Alarm Systems	1.00	lot	EE	0	0	0	249,444	0	249,444	0	249,444
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	79,392	79,392	0	79,392
	То	tal for Activi	tv 1FCFNST6	350:		0	0	1.590.897	79.392	1.670.289	0	1.670.289

#### Line Item 1 - Install Limited Area Fencing

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

Experience Item Desc -

Breakdown of Cost Data:

Item - Fencing

Units - 3000 feet

Unit Cost - \$100/foot

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

	Resources	Cost Element	Skill	Department	Curve	Quantity	Units
--	-----------	--------------	-------	------------	-------	----------	-------

Cost Risk

Project **Rocky Flats Closure Project** 

WBS Filter 1FCF **Baseline Cost and Basis of Estimate** Activity Filter

A5H SUBCONTRACTED SRVS 0000 NONE K289S PA Closure Max Backload

Factors 3000 Feet 100 Dollars/Foot 1.35 Constr Mat

## Line Item 2 - Install Limited Area Access Systems

1FCF02

1FCFNST650

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

Experience Item Desc -

Breakdown of Cost Data:

Item - Electronic Access Systems

Units - 18 Systems

Unit Cost - \$40,000/ sytem plus 100 hours of design at \$82/hour

Unit Cost Adjustment factor -

Revised Unit Cost -Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

## Resources

WBS No:

Activity ID:

BOE

es			Cost Element			Skill			Department	Cı	ırve	Quantity	Units
ſ	A5H	SUBCON	ITRACTED SRVS	0000	NONE		K289S	PA Clos	ure	Max B	ackload	129,869.10	Dollars
	Factors	18	Systems		82	Dollars/Hr		100	Hrs/System				
										0.87987	[SYS 06150	0] .879872 - Sys	stem
	۸ <i>E</i> LI	CLIDCON	TDACTED CDVC	0000	NONE		Kaone	DA Clos	uro	May P	ooklood	0EE 22E 60	Dollara

A5H SUBCONTRACTED SRVS | 0000 | NONE K289S PA Closure

Factors 18 Systems 40000 Dollars/System 1.35 Constr Mat

#### Line Item 3 - Upgrade LA Building Alarm Systems

BOE

Estimators Experience - Over twenty-three years of Site, technical, and project management experience including Planning, Waste, Safety, Emergency Preparedness, Safeguards, Quality and Operations.

Experience Item Desc -

Breakdown of Cost Data:

Item - Alarm System Upgrades for Limited Area requirements

Units - 7 Systems

Unit Cost - \$30,000/system

Unit Cost Adjustment factor -

Revised Unit Cost -

Basis for adjustment -

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

#### Resource

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	K289S	PA Closure	Max Backload	249,443.70	Dollars
	_	7 0 1		000000 B II /O + 11 1		4.05 O			

Dollars/System Upgrade Factors Systems 30000 Constr Mat 1.35

0.87987 [SYS 061500] .879872 - System

0.87987 [SYS 061500] .879872 - System

Baseline Devl

Starts In FY

0.87987 [SYS 061500] .879872 - System

356,348.20 Dollars

# Line Item SYS - Contingency And Escalation

BOE

# Resources

es	Cost Element		Skill		Department	Curve	Quantity	Units	
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	45,939.16	Dollars
	Factors	45939.2 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	33,453.00	Dollars
_									

33453 Dollars Factors

#### Report Totals:

Labor Hours Total	Labor Cost Total	Materials/Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost	
23,799	931,406	4,278,804	380,833	5,591,043	387,984	5,979,027	

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